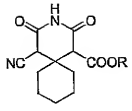
CLAIMS

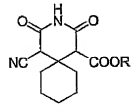
1. A compound of formula VI



VI

where R is chosen from hydrogen, alkyl, substituted alkyl, benzyl.

2. Use of the compound of formula VI:

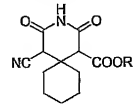


VI

where R is chosen from hydrogen, alkyl, substituted alkyl, benzyl, as the intermediate, in the synthesis of compounds usable as Gabapentin precursors.

3. Use as claimed in claim 2, wherein said gabapentin precursor is 3,3-pentamethylene glutaric acid monoamide.

4. Process for preparing the compound of formula VI,



VI

where R is chosen from hydrogen, alkyl, substituted alkyl, benzyl, comprising the following steps:

(i) condensing cyclohexanone with cyanoacetamide to obtain 2-cyclohexylidene-2-cyanoacetamide;

(ii) condensing said 2-cyclohexylidene-2-cyanoacetamide with a malonic acid ester of formula

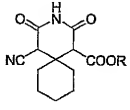
where R' and R", the same or different, represent alkyl, substituted alkyl, benzyl.

5. Process as claimed in claim 4, wherein the malonic ester is chosen from ethyl malonate, methyl malonate, dibenzylmalonate.

6. Process as claimed in claims 4-5, wherein the passages (i) and (ii) are undertaken in a single reactor without isolating the intermediate compounds.

7. Process for preparing 3,3-pentamethylene glutaric monoamide, characterised by the following steps:

(a) subjecting the compound VI



VI

to hydrolysis and subsequent decarboxylation, where R is chosen from hydrogen, alkyl, substituted alkyl, benzyl, to obtain 2,4-dioxo-3-azaspiro[5,5]undecane;

(b) subjecting the 2,4-dioxo-3-azaspiro[5,5]undecane to further hydrolysis, to obtain 3,3-pentamethylene glutaric acid monoamide.

8. Process as claimed in claim 7, wherein the hydrolysis in step (a) takes place under basic conditions.

9. Process as claimed in claim 7, wherein the decarboxylation in step (a) takes place under acidic conditions.

10. Process as claimed in claim 7, wherein the hydrolysis in step (b) takes place under basic conditions.

11. Process as claimed in claim 7, achieved without isolating the intermediate compounds.